

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

16. (ORIGINAL) A method of analyzing three-dimensional structures including a first structure expressed by three-dimensional coordinates of elements belonging to a first point set and a second structure expressed by three-dimensional coordinates of elements belonging to a second point set, comprising the steps of:

- a) dividing the first point set and second point set into first subsets and second subsets, respectively, according to a secondary structure exhibited by the three-dimensional coordinates of the elements of the first and the second point sets;
- b) generating a combination of correspondence satisfying a first restriction condition between the first subsets and the second subsets from among candidates for the combination of correspondence;
- c) determining an optimum correspondence between the elements belonging to each pair of subsets corresponding in the combination of correspondence generated in the step b), and
- d) calculating a root mean square distance between all of the elements corresponding in the optimum correspondence in the step c).

17. (ORIGINAL) A method of claim 16, wherein the optimum correspondence determining step comprising the substeps of:

- i) generating a combination of correspondence satisfying a second restriction condition between the elements belonging to the subsets corresponding in the combination of the correspondence generated in the step b);
- ii) calculating a root mean square distance between the elements corresponding in the combination of the correspondence generated in the substep i);

iii) selecting a combination of the correspondence as the optimum correspondence according to the value of the root mean square distance value calculated in the substep ii).

23. (ORIGINAL) An apparatus for analyzing three-dimensional structures including a first structure expressed by three-dimensional coordinates of elements belonging to a first point set and a second structure expressed by three-dimensional coordinates of elements belonging to a second point set, comprising:

means for dividing the first point set and the second point set into first subsets and second subsets, respectively, according to a secondary structure exhibited by the three-dimensional coordinates of the elements of the first and the second point sets;

means for generating a combination of correspondence satisfying a first restriction condition between the first subsets and the second subsets from among candidates for the combination of correspondence;

means for determining an optimum correspondence between the elements belonging to each pair of subsets corresponding in the combination of correspondence generated in the generating means, and

means for calculating a root mean square distance between all of the elements corresponding in the optimum correspondence.